

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE 03/01156

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B21J 1/04  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B21J, B21C, B21D, B23P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI, TXTE, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2264266 A (G.H. JACOBS ET AL), 25 November 1941 (25.11.41), figures 1-15 --	1-10
A	DATABASE WPI Week 198228 Derwent Publications Ltd., London, GB; Class M21, AN 1982-58034E & JP 57089466 A (MITSUBISHI KEIKINZOKU KOGYO) 03 June 1982 (1982-06-03) abstract --	1-10
A	US 4570843 A (HIKARU MATSUZAKI ET AL), 18 February 1986 (18.02.86), figure 5, abstract --	1-10

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

Date of mailing of the international search report

15 October 2003

17-10-2003

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3706118 A (RALPH W. HILTON ET AL), 19 December 1972 (19.12.72), figures 1-6, abstract  -- -----	1-10

## INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

International application No.

PCT/SE 03/01156

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
US	2264266	A	25/11/41	NONE	
US	4570843	A	18/02/86	DE 3200631 A,C	29/07/82
				FR 2498006 A,B	16/07/82
				JP 1488950 C	23/03/89
				JP 57118337 A	23/07/82
				JP 63035055 B	13/07/88
				JP 1441191 C	30/05/88
				JP 57121823 A	29/07/82
				JP 62047088 B	06/10/87
				JP 57121825 A	29/07/82
US	3706118	A	19/12/72	GB 1281711 A	12/07/72
				US 3498221 A	03/03/70